

September 3, 2019

Bureau Chief Air Quality Bureau New Mexico Environmental Department 525 Camino de los Marquez, Suite 1 Santa Fe, New Mexico 87505

Certified Mail/Return Receipt

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RE: Amendment-2 to the May 15, 2019 Fenceline Benzene Monitoring Corrective Action Plan for the Artesia Refinery: Plan for Removal of Tank 57

HollyFrontier Navajo Refining LLC (Navajo) submits this letter to update the Fenceline Benzene Corrective Action Plan (CAP) for the Artesia, New Mexico refinery pursuant to the National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries (MACT CC) at 40 CFR 63.658(h). Specifically, this letter describes Navajo's plan to permanently remove Tank 57 from benzene-containing liquid service and follows our CAP letters of May 15, 2019 and July 3, 2019. We have identified Tank 57 as the primary source contributing to an annual average benzene concentration above the MACT CC action level of 9 micrograms per cubic meter. Based on further technical evaluation, Navajo intends to remove benzene-containing material from Tank 57 no later than September 26, 2019 with a target removal timeframe of September 12, 2019, such that the tank will not store benzene-containing liquid in the future. The Company anticipates that this action will cause benzene concentrations at the fenceline to remain below the MACT action level on a permanent basis. In addition, Navajo will implement engineering controls, and other measures, outlined below in the event the facility's BenFree Unit experiences any operational issues after Tank 57 is removed from current service.

We appreciated the opportunity to discuss the plan for disabling Tank 57 from its current service as described in this letter and the Artesia fenceline data with the U.S. Environmental Protection Agency (USEPA) and New Mexico Environment Department (NMED) on our August 27, 2019 conference call. Navajo remains committed to proactively addressing the source of benzene emissions detected at the Artesia fenceline and working cooperatively with USEPA and NMED on these issues.

Tank 57 Benzene Removal Plan and Timing

As described in our July 3, 2019, CAP letter, Navajo isolated Tank 57 from service on May 24, 2019, with no product being moved into or out of the tank. Based on further assessment at the site, Navajo has determined that Tank 57 will no longer be needed to store benzene containing streams both prior to, and after, implementation of the ISOM Project. Navajo communicated on the August 27 call with NMED and EPA that Tank 57 will have all benzene containing material removed no later than 30 days from August 27 (September 26) with a target removal timeframe of 2 weeks (September 12).

The refinery is working to safely and expeditiously stop any further benzene emissions from Tank 57. Navajo began removing material from Tank 57 on August 27 in preparation for removing the tank from the service of storing benzene containing material. The refinery intends to use a combination of nitrogen blanket and a thermal oxidizer (TO) to ensure safety and control emissions generated from emptying and refilling the tank. The next steps and controls to fully implement removal of Tank 57 from its present service include the following measures:

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- Submit Permit Application (Administrative Revision) for use of the TO
 - o Expected submittal 9/3
 - o The TO is expected onsite 9/3 and to be available for use on 9/4
- Pump remaining liquid out to blending tank 411 with the transfer pump until the pump loses suction begin the week of 9/3
- Switch to temporary pump connected to the water draw to remove remaining liquid (sump draw)
- When the roof is set on its legs (landed), initiate a nitrogen blanket and TO controls
 - Nitrogen is used to fill the vapor space created when the roof is landed and emptied. This is to limit the amount of oxygen under the roof to eliminate the potential for a flammable atmosphere inside the tank.
 - The TO will be used to control vapors that may be emitted during the emptying process and the vapors emitted during the filling process to minimize impact to the environment.
- When removal of liquid from the water draw is complete (minimal product remains) introduce approximately 6" of Naphtha Splitter Bottoms (Hydrotreated C7+ Naphtha, which does not contain benzene) to sponge any light naphtha remaining in the tank
- Pump the sponge material out to Tank 411
- Refloat the roof with Naphtha Splitter Bottoms above the level for the vacuum breaker to seal.

Operation of BenFree Unit without Tank 57 until ISOM Project Implementation

In the event that there are operational issues with the BenFree Unit or hydrogen supply to the unit until implementation of the ISOM Project, the light naphtha stream will be routed to storage in blending tanks (typically, Tank 411). This is the current operational procedure at the refinery. Tank 411 presently stores BenFree Unit material, and material from Tank 411 is blended with other refinery products to make gasoline.

Tank 57 Seal Assessment

The call on August 27 also included a discussion of the seals on Tank 57 and assessment of the tank seals. As background, Navajo installed the current roof on Tank 57 prior to placing the tank in its current light naphtha service. Navajo intends to perform a primary seal inspection within two weeks after the roof is floated pursuant to the above plan for removal of Tank 57 from benzene-containing liquid service. During the primary seal inspection, the secondary seal will be pulled back in order to allow the inspector to inspect the entire seal fabric material and measure any gaps between the tank wall and the seal shoe. We will review the results of the primary seal inspection performed after the roof is floated and initiate any appropriate follow-up measures based on the inspection.

If you have any questions regarding this CAP update, please contact me at <u>Scott.Denton@HollyFrontier.com</u> or by phone at 575-746-5487. Thank you again for your consideration.

Sincerely,

Scott M. Denton

Environmental Manager

Cc: Chief

Air, Toxics, and Inspections Coordination Branch Environmental Protection Agency, Region 6

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